EVOLUTION

INTERNATIONAL JOURNAL OF ORGANIC EVOLUTION

Volume IV, 1950

Published Quarterly

At Prince and Lemon Streets, Lancaster, Pa.

By the

Society for the Study of Evolution

TABLE OF CONTENTS

Number 1, March

Turrill, W. B. Character combinations and distribution in the genus *Fritillaria* and allied genera 1

Kerr, Warwick E. Evolution of the mechanism of caste determination in the genus *Melipona* 7

Spiess, Eliot B. Experimental populations of *Drosophila persimilis* from an altitudinal transect of the Sierra Nevada 14

Reed, S. C., and E. W. Reed. Natural selection in laboratory populations of *Drosophila*. II. Competition between a white-eye gene and its wild type allele 34

Pittendrigh, Colin S. The ecoclimatic divergence of *Anopheles bellator* and *A. homunculus* 43

Pittendrigh, Colin S. The ecotopic specialization of *Anopheles homunculus;* and its relation to competition with *A. bellator* 64

Schmidt, Karl Patterson. Modes of evolution discernible in the taxonomy of snakes 79

Wood, Albert E. Porcupines, paleogeography and parallelism 87

Petrides, George A. A fundamental sex difference between lagomorphs and other placental mammals 99

Stebbins, G. L., Jr. Evolution in the Soviet Union 99

Hubbs, Carl L. Introgressive hybridization 100

Number 2, June

Zohary, M. Evolutionary trends in the fruiting head of Compositae 103

Rick, Charles M. Pollination relations of *Lycopersicon esculentum* in native and foreign regions 110

Miller, Dwight D. Mating behavior in *Drosophila affinis* and *Drosophila algonquin* 123

Koopman, Karl F. Natural selection for reproductive isolation between *Drosophila pseudoobscura* and *Drosophila persimilis* 135

Mayr, Ernst. The role of the antennae in the mating behavior of female *Drosophila* 149

Miller, Robert Rush. Speciation in fishes of the genera *Cyprinodon* and *Empetrichthys,* inhabiting the Death Valley region 155

Gregory, William K. Parallel and diverging skeletal evolution in vertebrates and arthropods 164

Wallace, Bruce. Autosomal lethals in experimental populations of *Drosophila melanogaster* 172

Dunbar, Carl O. The species concept: Further discussion 175

Elias, Maxim K. Paleontologic versus neontologic species and genera 176

Number 3, September

Grant, Verne. The protection of the ovules in flowering plants 179

Smith, Harold H. Developmental restrictions on recombination in *Nicotiana* 202

Brito da Cunha, A., H. Burla, and Th. Dobzhansky. Adaptive chromosomal polymorphism in *Drosophila willistoni* 212

MAY 12 1952

IVES, PHILIP T. The importance of mutation rate genes in evolution 236
BLAIR, W. FRANK. Ecological factors in speciation of *Peromyscus* 253
RIPLEY, S. DILLON. Polymorphism in a woodpecker (*Picus flavinucha*) 276

NUMBER 4, DECEMBER

LACK, DAVID. Family-size in titmice of the genus *Parus* 279
MAYR, ERNST, and ERWIN STRESEMANN. Polymorphism in the chat genus *Oenanthe* (Aves) 291
DANFORTH, C. H. Evolution and plumage traits in *Phasianus* x *Chrysolophus* hybrids 301
SPIETH, HERMAN T., and T. C. HSU. The influence of light on the mating behavior of seven species of the *Drosophila melanogaster* species group 316
MERRELL, DAVID J. Measurement of sexual isolation and selective mating .. 326
FASSETT, NORMAN C., and JONATHAN D. SAUER. Studies of variation in the weed genus *Phytolacca*. I. Hybridizing species in northeastern Colombia 332
MATHER, KENNETH. The genetical architecture of heterostyly in *Primula sinensis* 340
INGLES, LLOYD G. Pigmental variations in populations of pocket gophers ... 353
BABCOCK, ERNEST B. Supplementary notes on *Crepis*. III. Taproot versus rhizome in phylogeny 358
HOOIJER, DIRK A. The study of subspecific advance in the Quaternary 360
NICHOLS, J. T. Geographic races and speciation 361
CASPARI, ERNST. Visible plasmagenes 362
MAYR, ERNST. Isolation, dispersal and evolution 363